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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,779	07/06/2001	Michael K. Brand	12177/21101	7688

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EXAMINER

SHARON, AYAL I

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/900,779	BRAND ET AL.	
	Examiner	Art Unit	
	Ayal I Sharon	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 July 2001.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-22 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 21 May 2002 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Introduction

1. Claims 1-22 of U.S. Application 09/900,779 filed on 7/6/2002 are presented for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-9, 11-19, and 21-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to an abstract mathematical algorithm which is not implemented in the technological arts, for example, in a computer or on a computer readable medium. The claimed invention is therefore not concrete or tangible. See MPEP §2106 (A), and *In re Warmerdam*, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). See also *Schrader*, 22 F.3d at 295, 30 USPQ2d at 1459.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed limitation "... wherein said step of calculating includes using the relationship EXP [1/k $\sum_{i=1}^k \ln(t_2 - t_1)$] ..." is not defined in the specification.

7. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The function in the claim, EXP [1/k $\sum_{i=1}^k \ln(t_2 - t_1)$], simplifies to EXP [1/k * k * ln(t₂ - t₁)], which simplifies to (t₂ - t₁). It is not clear if the function was unnecessarily complicated, or if there is a typographical error in the function. Moreover, the claimed limitation "... wherein said step of calculating includes using the relationship EXP [1/k $\sum_{i=1}^k \ln(t_2 - t_1)$] ..." is indefinite because it is not clear how the relationship is being used, or even what this function corresponds to (i.e., EXP [1/k $\sum_{i=1}^k \ln(t_2 - t_1)$] = X. What does X represent?).

8. The specification regarding the claimed invention is deficient in the areas cited above. Accordingly, the examiner has made prior art rejections based on the limited scope of information contained in the specification for supporting the

claims. The rejections are complete and specifically applied against the claims based on this limited disclosure.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

10. The prior art used for these rejections is as follows:

11. Analog Devices's Reliability Handbook. pp.1-23 out of 86 pages. © 2000.

(Henceforth referred to as "**Reliability Handbook**"). No day or month appear on the publication, therefore Examiner is assuming a date of Dec. 31, 2000.

12. The claim rejections are hereby summarized for Applicant's convenience. The detailed rejections follow.

- 13. Claims 1-4, 6, 10, and 21 are rejected under 35 U.S.C. 102(a) as being anticipated by Reliability Handbook.**

14. In regards to Claim 1, Reliability Handbook teaches the following limitations:

1. A method of estimating a life of a product, comprising:

determining accelerated stress testing data for the product using the relationship $t_F = AF \times \exp(t_A)$, the accelerated stress testing data representing the response of the product operating in a first environment; and

Applicants' equation, $t_F = AF \times \exp(t_A)$, can be rewritten as $AF = t_F / \exp(t_A)$.

Reliability Handbook (p.11) teaches a temperature acceleration factor where AF = t_1 / t_2 .

Reliability Handbook (p.11) also defines "t1" and "t2" as "Mean Time To Failure (MTTF) at T_{TEST} and T_{USE} ". Page 12 teaches that MTBF and MTTF are corresponding terms.

Examiner finds the two formulas to be corresponding when t_A and t_2 are small numbers.

calculating the mean-time-between-failures (MTBF) for the product operating in a second environment based on the accelerated stress testing data.

Reliability Handbook (p.14) teaches that:

"Applying these acceleration factors to the data above, the equivalent device hours at 55°C can be calculated for 125°C and 135°C. ... The failure rate can now be expressed in a number of ways: ... MTTF = 1 / Fr"

15. In regards to Claim 2, Reliability Handbook teaches the following limitations:

2. The method of claim 1, wherein said first environment is more likely than the second environment to cause the product to fail.

Reliability Handbook (p.14) teaches that:

"Applying these acceleration factors to the data above, the equivalent device hours at 55°C can be calculated for 125°C and 135°C. ... The failure rate can now be expressed in a number of ways: ... MTTF = 1 / Fr"

Examiner finds it to be inherent that integrated circuits are more likely to fail at higher temperatures.

16. In regards to Claim 3, Reliability Handbook teaches the following limitations:

3. The method of claim 1, wherein the accelerated stress testing data represents the length of time the product operates in the first environment before the product fails.

Reliability Handbook (p.14) teaches that:

"Applying these acceleration factors to the data above, the equivalent device hours at 55°C can be calculated for 125°C and 135°C. ... The failure rate can now be expressed in a number of ways: ... MTTF = 1 / Fr"

Examiner interprets the MTTF as corresponding to the claimed "length of time ... before the product fails".

17. In regards to Claim 4, Reliability Handbook teaches the following limitations:

4. The method of claim 1, wherein the accelerated stress testing data is derived from a plurality of different stress tests.

Reliability Handbook (Table III on p.13) teaches stress tests performed on devices, where the length of the tests vary in terms of hours.

Moreover, Reliability Handbook (p.14) teaches that multiplying the voltage and temperature acceleration factors produces a total acceleration factor.

18. In regards to Claim 6, Reliability Handbook teaches the following limitations:

6. The method of claim 1, further comprising calculating upper and lower confidence limits for the MTBF calculation.

Reliability Handbook (p.14) teaches that " $x = (1 - C.L.)$ where C.L. is the confidence level."

Examiner interprets that the 60% C.I. and 90% C.I. taught in Reliability Handbook (p.15) corresponds to the claimed "upper and lower confidence limits."

19. In regards to Claim 10, Reliability Handbook teaches the following limitations:

10. The method of claim 1, wherein said step of calculating is performed using a computer program.

Reliability Handbook (p.17) teaches that:

The equipment for doing these tests is all microprocessor controlled and the schematics for stimulating the product during burn-in and life test are stored as a program to facilitate ease of use and prevent the wrong programs being loaded.

20. In regards to Claim 21, Reliability Handbook teaches the following limitations:

- 21 . A method of estimating a life of a product, comprising:

determining accelerated stress testing data for the product using the relationship $t_F = AF \times \exp(t_A)$, the accelerated stress testing data representing the response of the product operating in a first environment; and

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Applicants' equation, $t_F = AF \times \exp(t_A)$, can be rewritten as $AF = t_F / \exp(t_A)$.

Reliability Handbook (p.11) teaches a temperature acceleration factor where $AF = t_1 / t_2$.

Reliability Handbook (p.11) also defines "t1" and "t2" as "Mean Time To Failure (MTTF) at T_{TEST} and T_{USE} ". Page 12 teaches that MTBF and MTTF are corresponding terms.

Examiner finds the two formulas to be corresponding when t_A and t_2 are small numbers.

calculating the mean-time-between-failures (MTBF) for the product operating in a second environment based on the accelerated stress testing data.

Reliability Handbook (p.14) teaches that:

"Applying these acceleration factors to the data above, the equivalent device hours at 55°C can be calculated for 125°C and 135°C. ... The failure rate can now be expressed in a number of ways: ... $MTTF = 1 / Fr$ "

wherein said first environment is more likely than the second environment to cause the product to fail; and

Reliability Handbook (p.17) teaches that:

Applying these acceleration factors to the data above, the equivalent device hours at 55°C can be calculated for 125°C and 135°C.

Examiner interprets that the higher temperature environments are more likely to cause failure than the 55°C environment.

wherein the accelerated stress testing data is derived from a plurality of different stress tests.

Reliability Handbook (Table III on p.13) teaches stress tests performed on devices, where the length of the tests vary in terms of hours.

Moreover, Reliability Handbook (p.14) teaches that multiplying the voltage and temperature acceleration factors produces a total acceleration factor.

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. The prior art used for these rejections is as follows:

23. Analog Devices's Reliability Handbook, pp.1-23 out of 86 pages. © 2000.

(Henceforth referred to as "**Reliability Handbook**"). No day or month appear on the publication, therefore Examiner is assuming a date of Dec. 31, 2000.

24. Military Standard MIL-STD-690C. March 26, 1993. (Henceforth referred to as "**MIL-STD-690C**").

25. Hobbs, Gregg. "What HALT and HASS Can Do For Your Products". © 1997, Nelson Publishing. (Henceforth referred to as "**Hobbs**").

26. The claim rejections are hereby summarized for Applicant's convenience. The detailed rejections follow.

27. Claims 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reliability Handbook in view of MIL-STD-690C.

28. In regards to Claim 7, Reliability Handbook does not expressly teach the following limitations:

7. The method of claim 1, wherein said accelerated stress testing data is determined at least in part from bill of materials (BOM) information on the product.

However, MIL-STD-690C (pp.6-8) teaches the use of sample forms to be filled out when performing failure rate tests. These forms include fields such as "Sample Serial Numbers (pp.7-8)", "Type Designation in lot (p.6)". Examiner interprets these as being BOM information on the product which is used in determining the accelerated stress testing data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Reliability Handbook with those of MIL-STD-690C, because both teach accelerated stress testing for determining failure rates.

29. In regards to Claim 22, Reliability Handbook teaches the following limitations:

22. A method of estimating a life of a product, comprising:

determining accelerated stress testing data for the product using the relationship $t_F = AF \times \exp(t_A)$, the accelerated stress testing data representing the response of the product operating in a first environment; and

Applicants' equation, $t_F = AF \times \exp(t_A)$, can be rewritten as $AF = t_F / \exp(t_A)$.

Reliability Handbook (p.11) teaches a temperature acceleration factor where $AF = t_1 / t_2$.

Reliability Handbook (p.11) also defines "t1" and "t2" as "Mean Time To Failure (MTTF) at T_{TEST} and T_{USE} ". Page 12 teaches that MTBF and MTTF are corresponding terms.

Examiner finds the two formulas to be corresponding when t_A and t_2 are small numbers.

calculating the mean-time-between-failures (MTBF) for the product operating in a second environment based on the accelerated stress testing data.

Reliability Handbook (p.14) teaches that:

"Applying these acceleration factors to the data above, the equivalent device hours at 55°C can be calculated for 125°C and 135°C. ... The failure rate can now be expressed in a number of ways: ... MTTF = 1 / Fr"

wherein said first environment is more likely than the second environment to cause the product to fail; and

Reliability Handbook (p.17) teaches that:

Applying these acceleration factors to the data above, the equivalent device hours at 55°C can be calculated for 125°C and 135°C.

Examiner interprets that the higher temperature environments are more likely to cause failure than the 55°C environment.

wherein said accelerated stress testing data is determined at least in part from bill of materials (BOM) information on the product.

However, MIL-STD-690C (pp.6-8) teaches the use of sample forms to be filled out when performing failure rate tests. These forms include fields such as "Sample Serial Numbers (pp.7-8)", "Type Designation in lot (p.6)". Examiner interprets these as being BOM information on the product which is used in determining the accelerated stress testing data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Reliability Handbook with those of MIL-STD-690C, because both teach accelerated stress testing for determining failure rates.

30. Claim 5, and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reliability Handbook in view of Hobbs.

31. In regards to Claim 5,

5. The method of claim 4, wherein the plurality of different stress tests includes a temperature test and a vibrational test.

Reliability Handbook teaches the use of temperature and voltage stress tests (see pp.11-12). However, Reliability Handbook does not expressly teach the use of vibrational tests.

Hobbs, on the other hand, Hobbs teaches (see p.2, para.1) that "The fatigue damage precipitated by temperature, rate of change of temperature, vibration, or some combination of them can be modeled in many ways, the least complex of which is Miner's criterion."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Reliability Handbook with those of Hobbs, because both temperature and vibration are factors that contribute to fatigue damage.

32. In regards to Claim 8, Reliability Handbook does not expressly teach the following limitations:

8. The method of claim 1, wherein said step of calculating is performed during the design of the product.

Hobbs, on the other hand, expressly teaches (p.1, para.3):

The stresses are not meant to simulate the field environments but to find the weak links in the design and manufacturing processes using only a few units and in a very short period of time.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Reliability Handbook with those of Hobbs, because both references pertain to the use of highly accelerated life tests (HALT).

33. In regards to Claim 9, Reliability Handbook does not expressly teach the following limitations:

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9. The method of claim 1, wherein said step of calculating is performed prior to manufacturing the product for commercial use.

Hobbs, on the other hand, expressly teaches (p.1, para.3):

The stresses are not meant to simulate the field environments but to find the weak links in the design and manufacturing processes using only a few units and in a very short period of time.

Moreover, it is inherently more cost effective to perform such tests prior to mass manufacturing the product for commercial use.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Reliability Handbook with those of Hobbs, because both references pertain to the use of highly accelerated life tests (HALT).

34. Claims 11-13 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reliability Handbook in view of Hobbs in further view of Official Notice.

35. In regards to Claim 11, Reliability Handbook does not expressly teach the following limitations:

11. The method of claim 1, wherein the accelerated stress testing data includes accelerated stress testing data for a previous design of the product.

Hobbs, on the other hand, expressly teaches (p.1, para.3):

The stresses are not meant to simulate the field environments but to find the weak links in the design and manufacturing processes using only a few units and in a very short period of time.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Reliability Handbook with those of

Hobbs, because both references pertain to the use of highly accelerated life tests (HALT).

Neither Reliability Handbook nor Hobbes expressly teach accelerated stress testing of a previous design, however, Official Notice is given that it would have been obvious to do so because this is the only way to determine if changes in design resulted in improved or degraded test results.

36. In regards to Claim 12,

12. The method of claim 11, wherein the accelerated stress testing data for the previous design of the product is derived from stress testing in an environment less likely to cause failure than said first environment.

Reliability Handbook (p.17) teaches that:

Applying these acceleration factors to the data above, the equivalent device hours at 55°C can be calculated for 125°C and 135°C.

Examiner interprets that the higher temperature environments are more likely to cause failure than the 55°C environment.

37. In regards to Claim 13, Reliability Handbook does not expressly teach the following limitations:

13. The method of claim 11, further comprising calculating a change in MTBF from the previous design of the product.

Neither Reliability Handbook nor Hobbes expressly teach accelerated stress testing of a previous design; however, Official Notice is given that it would have been obvious to do so because this is the only way to determine if changes in design resulted in improved or degraded test results.

Moreover, Official Notice is given that since Reliability Handbook teaches the calculation of MTBF as being the final result from the test procedure (see p.14), it would have been obvious to use a change in MTBF as the yardstick for measuring the improvement or degradation of the test results.

38. In regards to Claim 15, Reliability Handbook does not expressly teach the following limitations:

15. The method of claim 11, further comprising calculating a factor increase or decrease in the life of the product as compared to the life of the previous design of the product.

Neither Reliability Handbook nor Hobbes expressly teach accelerated stress testing of a previous design, however, Official Notice is given that it would have been obvious to do so because this is the only way to determine if changes in design resulted in improved or degraded test results.

Moreover, Official Notice is given that since Reliability Handbook teaches the calculation of MTBF as being the final result from the test procedure (see p.14), it would have been obvious to use a change in MTBF as the yardstick for measuring the improvement or degradation of the test results.

39. In regards to Claim 16, Reliability Handbook expressly teaches the following limitations:

16. The method of claim 11, wherein the accelerated stress testing data is derived from a plurality of different stress tests.

Reliability Handbook (Table III on p.13) teaches stress tests performed on devices, where the length of the tests vary in terms of hours.

Moreover, Reliability Handbook (p.14) teaches that multiplying the voltage and temperature acceleration factors produces a total acceleration factor.

40. In regards to Claim 17,

17. The method of claim 16, wherein the different stress tests include a temperature test and a vibrational test.

Reliability Handbook teaches the use of temperature and voltage stress tests (see pp.11-12). However, Reliability Handbook does not expressly teach the use of vibrational tests.

Hobbs, on the other hand, Hobbs teaches (see p.2, para.1) that "The fatigue damage precipitated by temperature, rate of change of temperature, vibration, or some combination of them can be modeled in many ways, the least complex of which is Miner's criterion."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Reliability Handbook with those of Hobbs, because both temperature and vibration are factors that contribute to fatigue damage.

41. In regards to Claim 18, Reliability Handbook does not expressly teach the following limitations:

18. The method of claim 11, wherein said step of calculating is performed during the design of the product.

Hobbs, on the other hand, expressly teaches (p.1, para.3):

The stresses are not meant to simulate the field environments but to find the weak links in the design and manufacturing processes using only a few units and in a very short period of time.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Reliability Handbook with those of Hobbs, because both references pertain to the use of highly accelerated life tests (HALT).

42. In regards to Claim 19, Reliability Handbook does not expressly teach the following limitations:

19. The method of claim 11, wherein said step of calculating is performed prior to manufacturing the product for commercial use.

Hobbs, on the other hand, expressly teaches (p.1, para.3):

The stresses are not meant to simulate the field environments but to find the weak links in the design and manufacturing processes using only a few units and in a very short period of time.

Moreover, it is inherently more cost effective to perform such tests prior to mass manufacturing the product for commercial use.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Reliability Handbook with those of Hobbs, because both references pertain to the use of highly accelerated life tests (HALT).

43. In regards to Claim 20, Reliability Handbook expressly teaches the following limitations:

20. The method of claim 11, wherein said step of calculating is performed using a computer program.

Reliability Handbook (p.17) teaches that:

The equipment for doing these tests is all microprocessor controlled and the schematics for stimulating the product during burn-in and life test are stored as a program to facilitate ease of use and prevent the wrong programs being loaded.

Conclusion

44. Regarding Tan et al., U.S. Patent 6,816,813, Examiner finds that col.5, line 42 to col.7, line 7 constitutes prior art as per *In re Epstein*, 32 F.3d 1559, 31 USPQ2d 1817 (Fed. Cir. 1994), due to the citation of the earlier prior art in col.6, line 66 to col.7, line 7 of the reference.
45. Regarding Gullo et al., U.S. Patent 6,684,349, Examiner finds that col.10, lines 44-65 constitute prior art for the same reason.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ayal I. Sharon whose telephone number is (571) 272-3714. The examiner can normally be reached on Monday through Thursday, and the first Friday of a biweek, 8:30 am – 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached at (571) 272-3716.

Any response to this office action should be faxed to (703) 872-9306 or mailed to:

Director of Patents and Trademarks
Washington, DC 20231

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center 2100 Receptionist, whose telephone number is (571) 272-2100.

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Ayal I. Sharon

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December 29, 2004



SAMUEL BRODA, ESQ.
PRIMARY EXAMINER